M/017/001

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

February 23, 1996

TO: Minerals File

FROM: Tony Gallegos, Senior Reclamation Specialist

RE: Site Inspection, Nuclear Fuel Services/Plateau Resources, Ltd., Tony M/Lucky Strike Mine, M/017/001, Garfield County, Utah

Inspection Date:	February 15, 1996
Conditions:	Clear skies and warm
Time of Inspection:	1240 - 1645
Participants:	Daryl Winters, George Smith, Nuclear Fuels Services; Tony Gallegos, DOGM

Mill Area

We first visited the mill to examine the seed mix which was used on the recently reclaimed areas. A tag on the bag of seed mix listed the following species at two pounds each: rabbitbrush, crested wheatgrass, alkali sacaton, fourwing saltbrush, shadescale, and indian ricegrass.

Electrical Shop Area

We left the mill area and went to the site of the maintenance and electrical shops, as shown on the map and listed in the Division's reclamation estimate. All buildings, structures and fencing have been removed from this area. The area has been regraded. There was a concrete foundation under the maintenance shop area, which was reinforced and considerably thick. This foundation was broken up and buried onsite under at least two feet of soil cover. The remaining demolition debris was removed from the site. The soils that were spread back on this area had been stockpiled around the edges. After the buildings were demolished and the debris removed, these soils were spread. Some soil was also borrowed from areas adjacent to these facilities. There are still two propane tanks present on this portion of the site. Mr. Winters indicated these tanks will be removed shortly.

This reclaimed area was very clean and tidy; however, the surface roughness was as smooth as a golf course. Daryl explained that after completing the demolition and cleanup work, the soil was spread over the site and the seed was broadcast from the back of a pickup truck followed by a drag. The use of the drag is the main reason for the smoothness of the site. In general, reclaimed areas should be left with a rough and uneven surface. This roughness helps in water retention and windblown soil and seed retention. Since the area had already been seeded and dragged, it may not be a good idea to roughen up the surface by driving a cat over it. I would discuss the surface roughness

issue with our biologist when I returned to the office and contact Daryl. This recent reclamation work began in November 1995 and continued through January 1996. Seed was visible on this reclaimed area.

Because the reclaimed area is so flat and level, I suggested they block the access road with boulders at the culvert location, or remove the culvert. In either case, the portion of access road from the culvert crossing to the reclaimed area should be ripped and then seeded.

Mine Complex Area

The next area visited was the mine complex area near the portals and ore bins. In this area, the "mine building" adjacent to a block structure was removed. The block structure was still present. The footprint of the building was regraded and seeded. Daryl also pointed out they had removed some concrete sidewalks within this complex area. The guard shack was also removed from this area. An isolated portion of fencing within the main complex fencing was removed. Another building which was adjacent to the water well had also been removed. The building was wood with a metal roof. The wooden foundation was all that remained during this inspection. After the building by the well was removed, the fence was realigned to turn in by the back-up generator building.

Looking down the canyon from top of the waste dump near the portals we could see the site where the "surface construction office & shop" buildings used to be. The two trailer buildings and concrete pad in this area have been removed. A pile of rebar was still in this area. Daryl indicated the rebar would be removed shortly for use in converting the ballpark by the motel into a boat storage facility. The concrete pad in this area was approximately 12 inches thick. It was broken up and buried in a trench with a minimum of two feet of soil cover.

Dam & Boreholes

We next drove on the county road up to the dam and Boreholes. This road continues through the drainage of the canyon. Along this road, just above the ore stockpiles are a number of core hole samples that someone had taken from the sandstone wall. There is a long row of 20 - 40 shallow core holes. It is unknown at this time who is doing the sampling or the reasons for it. Photographs were taken of this area.

We then continued to the first borehole, which is Borehole #4. This borehole is cased for the entire length and has a fan over the opening. This is a six foot diameter borehole located in the northwest quarter of section 16. Another borehole is visible in the distance from this site at a magnetic azimuth of 40° using a brunton compass (compass had a built in declination adjustment of 12° east). This second borehole does not show up at this location on the maps I had. A photograph was taken of this borehole and another photograph showing the borehole out in a distance. Daryl asked me to look into the reclamation estimate for closing these boreholes. He thought the assumed disturbance of one acre per borehole may not be appropriate. At Borehole #4, the borehole and road disturb less than ½ acre. The actual disturbed area located off of the BLM road is approximately 25 feet wide by up to 125 feet long. This disturbance includes the short road spur and the borehole area. At this borehole, there is a wooden box nearby which deals with valve connections for the water line.

On the hill above and directly west of this site is a water tank. A fuel tank and generator were at this site when the fan was operating; however, none of those structures were present at this time.

Mr. Smith explained the procedures they would propose for closure of such a borehole. The proposal would be to excavate two trenches outside the collar of the shaft then blast the top section of the shaft down. They would then use these two trenches to anchor reinforced steel across the borehole area and then pour a concrete cap over this. The concrete would then be covered by two or more feet of soil cover so there would be no signs of the shaft. He agreed to provide some sketches and/or cost estimates for this proposal.

The next area visited was Borehole #3. This borehole is approximately 18 inches in diameter with a small fan in place. The borehole is probably cased for the upper 20 feet. There was a concrete pad around the borehole similar to the previous pad. There is a short section of steep road from this borehole down to the BLM road. A photograph was taken of this area looking north with the water tank and a road on the ridge in the background. In the concrete pad around this borehole are some initials and the date of 1983.

We next proceeded to the dam. Along the road to the dam you can see Borehole #2 with a butte in the background. The dam and pond was used for evaporating water pumped from the mine. The system works by pumping water into pipe lines around the perimeter of the pond and then spraying this water out through sprinklers to aid in evaporation. Electricity for the pumps was supplied through power lines coming from the underground workings up through the #2 borehole and leading over to the dam site. We next visited the crest of the dam. The up stream side of the dam is armored with rock and has tamarisk growing on it. Daryl indicated the tamarisk have been sprayed several times with an herbicide to try to get rid of them. Unfortunately it hasn't worked. On the down stream side of the dam are several monitoring wells. Daryl mentioned that when this dam was full, they did not find any leakage or seepage in these monitoring holes. The dam was constructed of borrowed clay materials from the adjacent hillsides in the immediate area.

The next area visited was the #2 Borehole, spoken of earlier. This borehole is approximately 5 feet in diameter with a 75hp fan on a concrete pad. The concrete pad is probably 8-12 inches thick but not reinforced. A photograph was taken of this fan and casing with Mr. Winters and Mr. Smith in the background. A detail photo was taken of this borehole with an open field book in the picture.

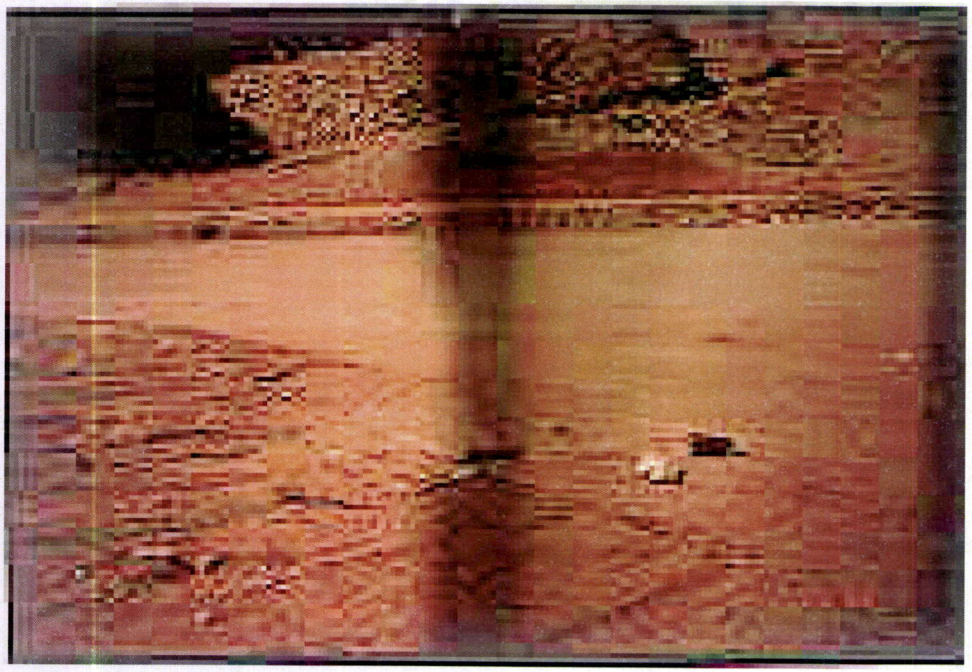
We returned on the BLM road which then connects to the county road. The borehole visible in the distance (believed to be the #5 Borehole, there is no #1 Borehole) from Borehole #4 has no road access. The road has been obliterated by erosion in a wash. Mr. Winters indicated Borehole #5 was approximately four feet in diameter with a concrete pad and fan similar to the other boreholes we visited. The drainage that the county road follows is called Hansen Creek.

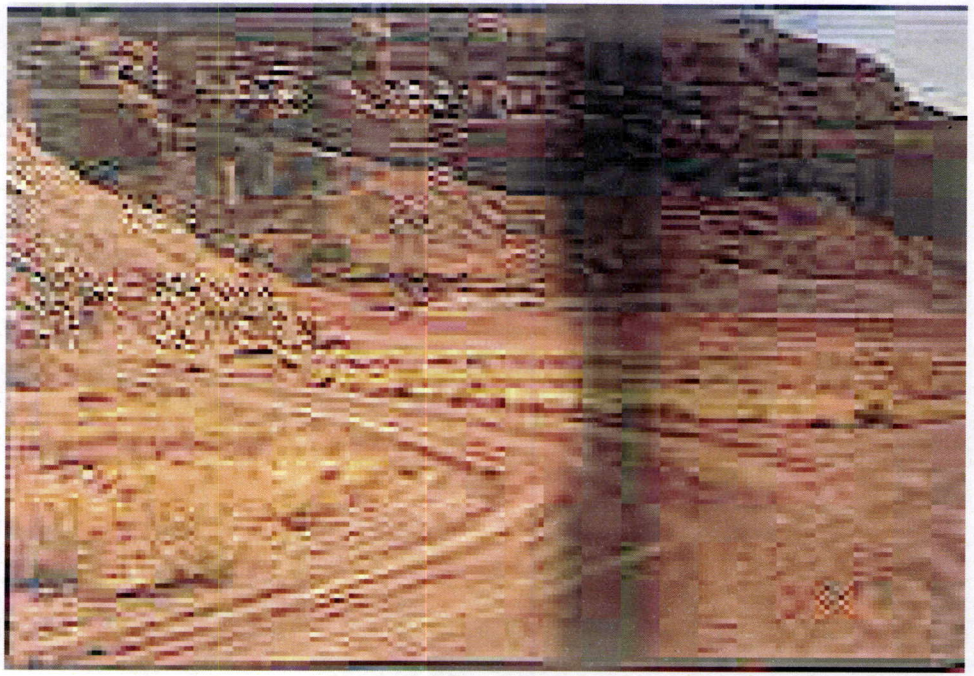
Photographs were taken of the areas visited during this inspection to document the current status of the site. We returned to the motel at Ticaboo for a brief meeting to wrap things up. In addition to writing up an inspection memo, I agreed to: (1) Adjust the bond estimate by removing

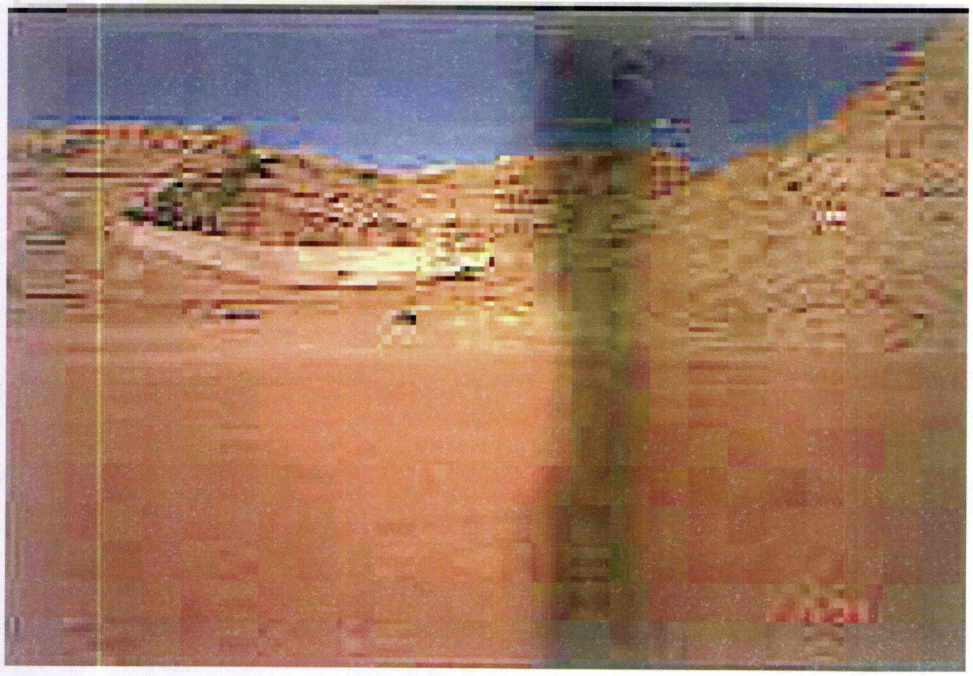
the cost of demolition of these buildings, which have been removed. (2) Adjust the estimate for closure and reclamation of the actual boreholes which were created now that we have more specific information. (3) Talk with our biologist about using a cat to roughen up the surface on the seeded electric shop area and call Daryl during the next week. (4) Send a letter describing the bond adjustments made by the Division in recognition of this reclamation.

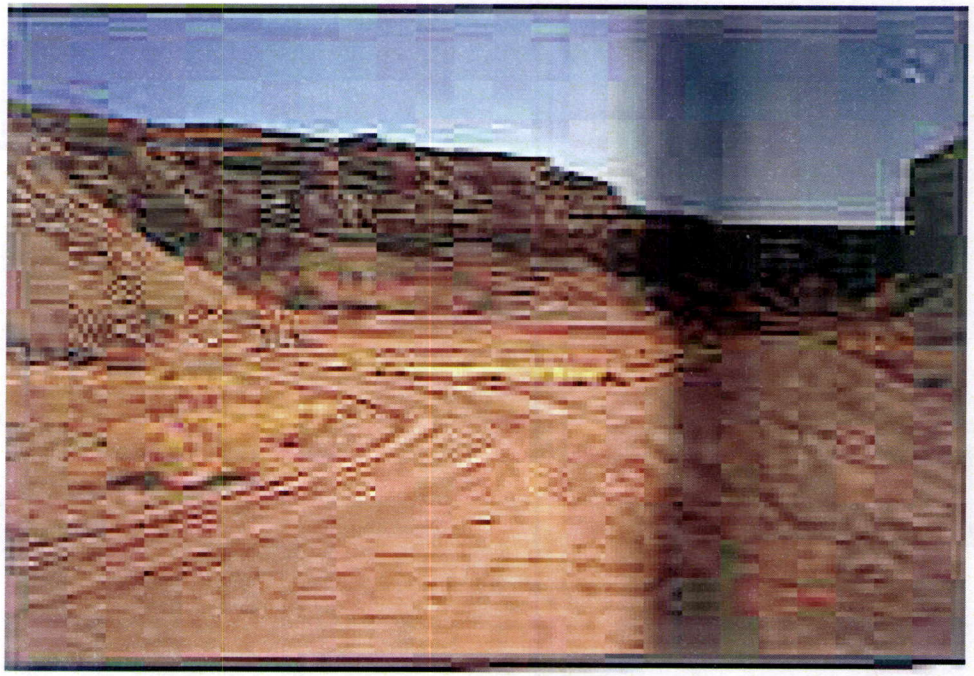
Daryl asked me to look into the amount of bond reduction for removal of the backup generator building. It is possible for them to remove this structure by relocating some of the equipment, although this is not desirable at this time unless it has a significant effect on the bond amount. Mr. Smith estimated that the proposed closure for the large diameter boreholes would cost around $5,000 each as a high estimate. Daryl planned on removing the materials remaining on the reclaimed sites (propane tanks, pile of rebar and wooden foundation) in the immediate future. In addition, they would block off access to the reclaimed electric shop area using boulders soon after receiving my phone call.

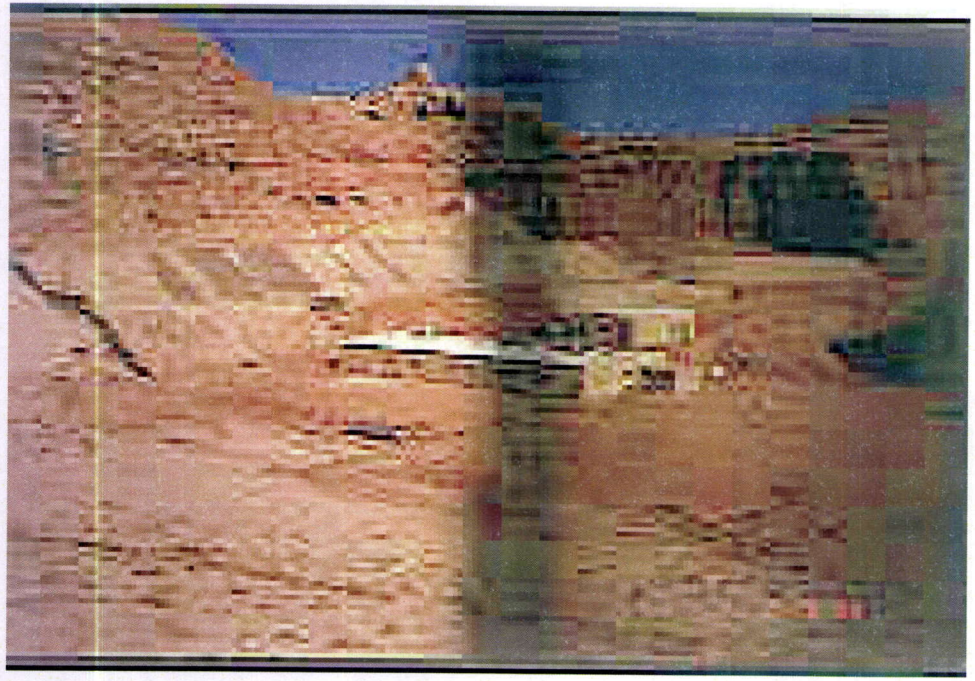
jb
cc: Daryl Winters, P.O. Box 2111 - Ticaboo, Lake Powell, Utah 84533 - (801) 788-2120
Al Dearth, Riverton, Wyoming office
M017001.INS

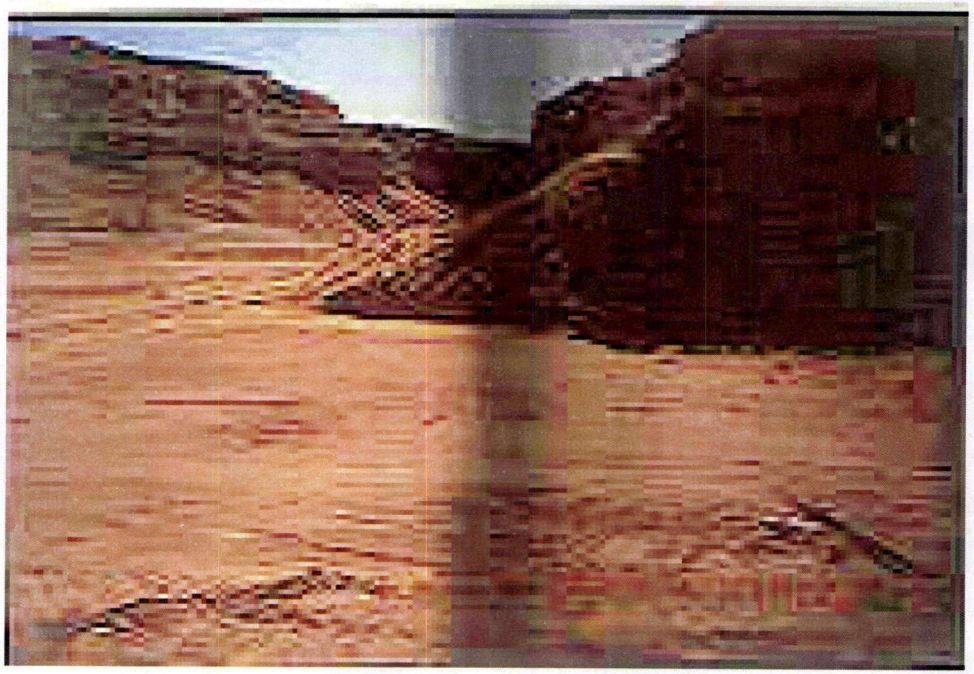


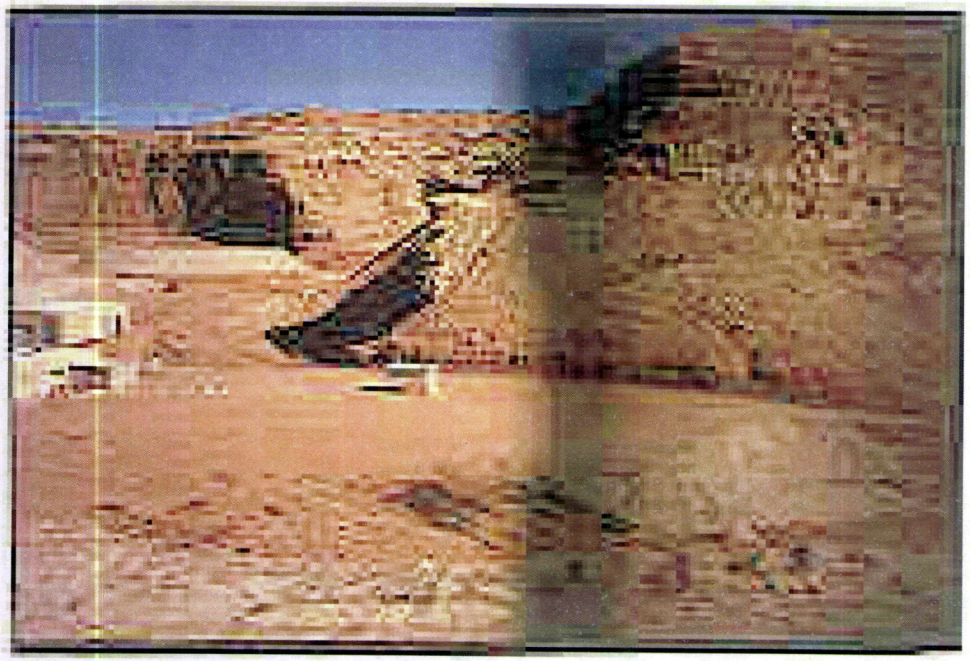


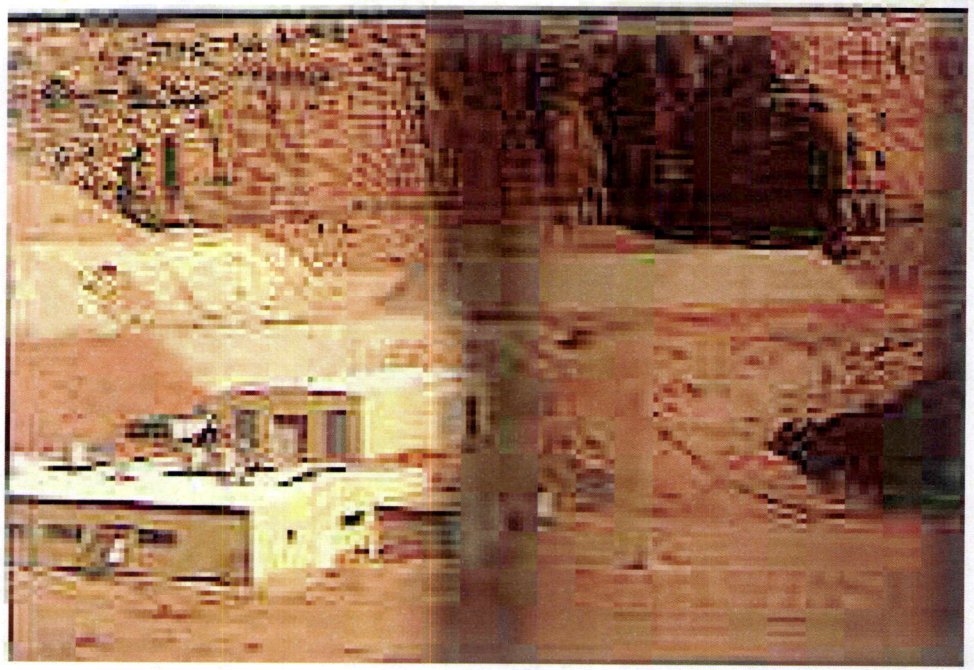


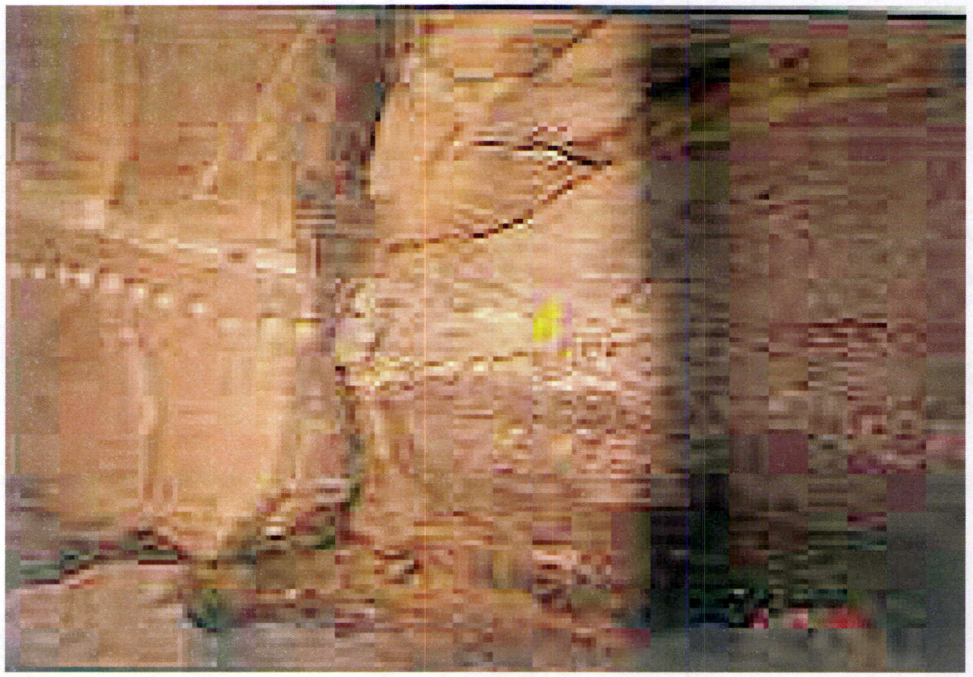


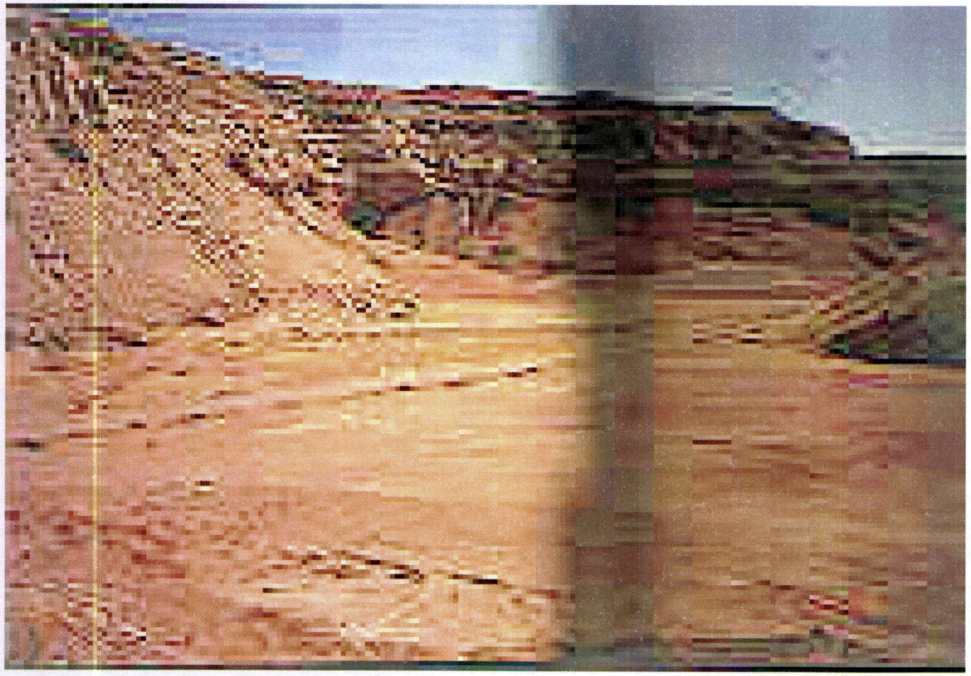


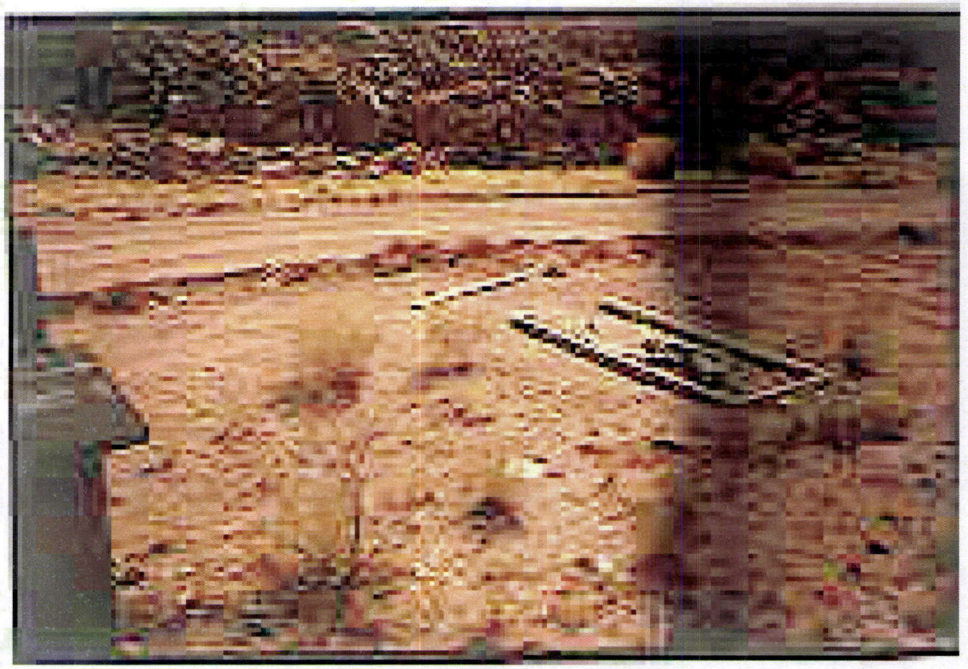


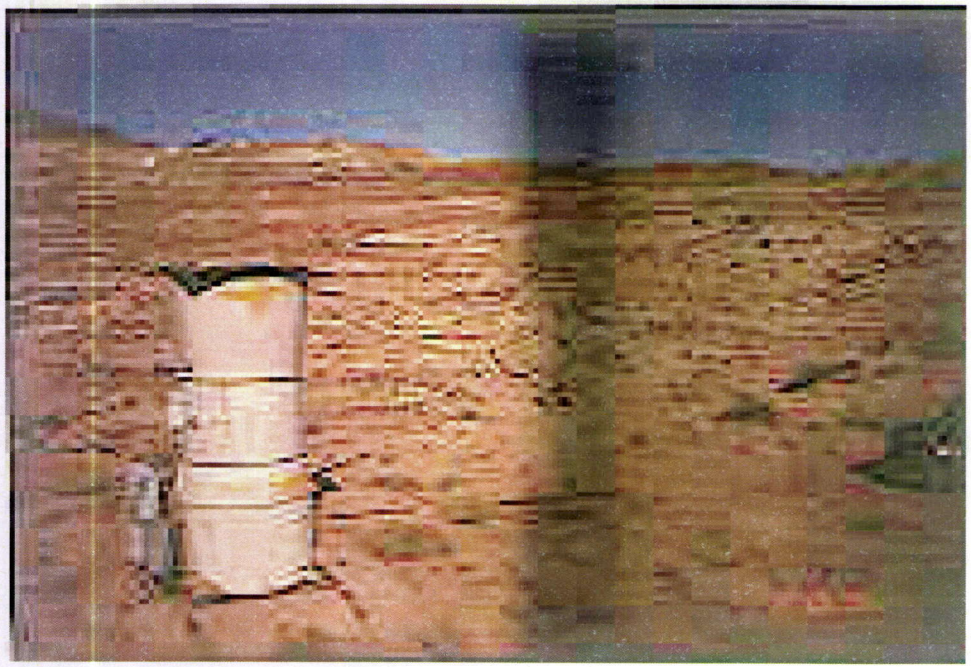


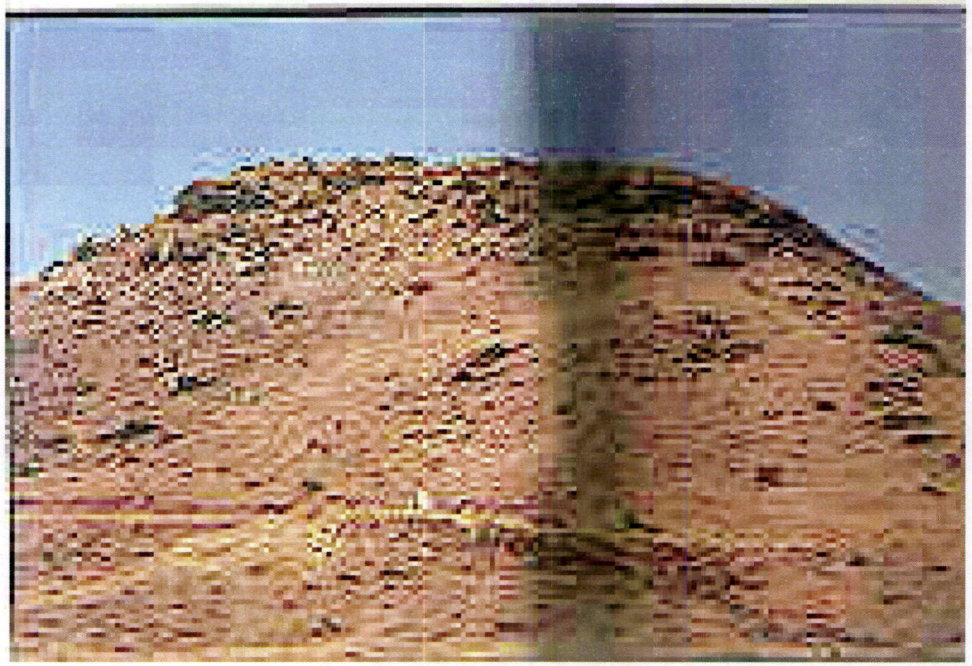


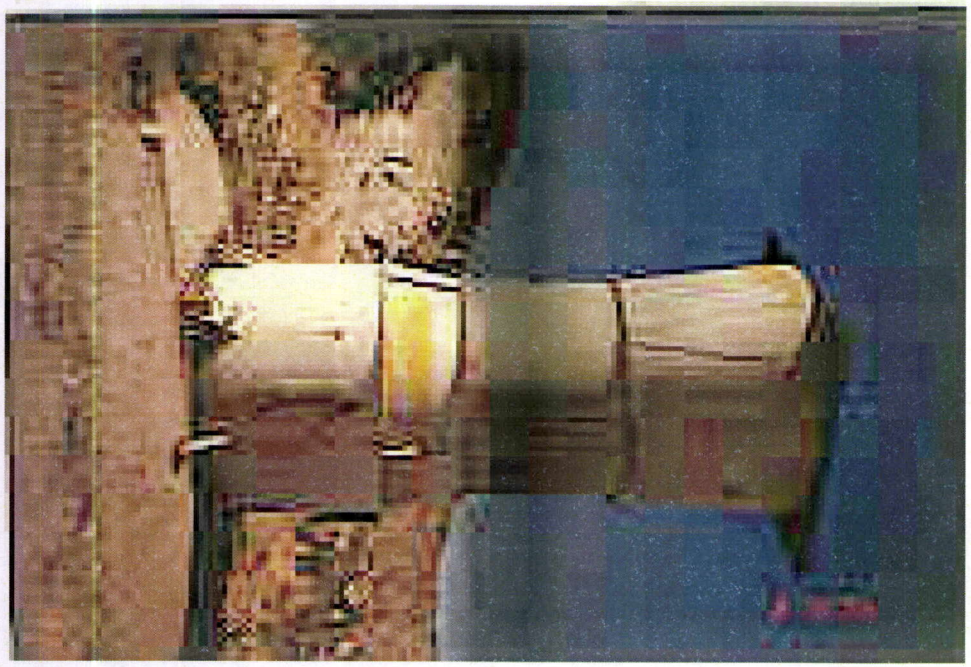


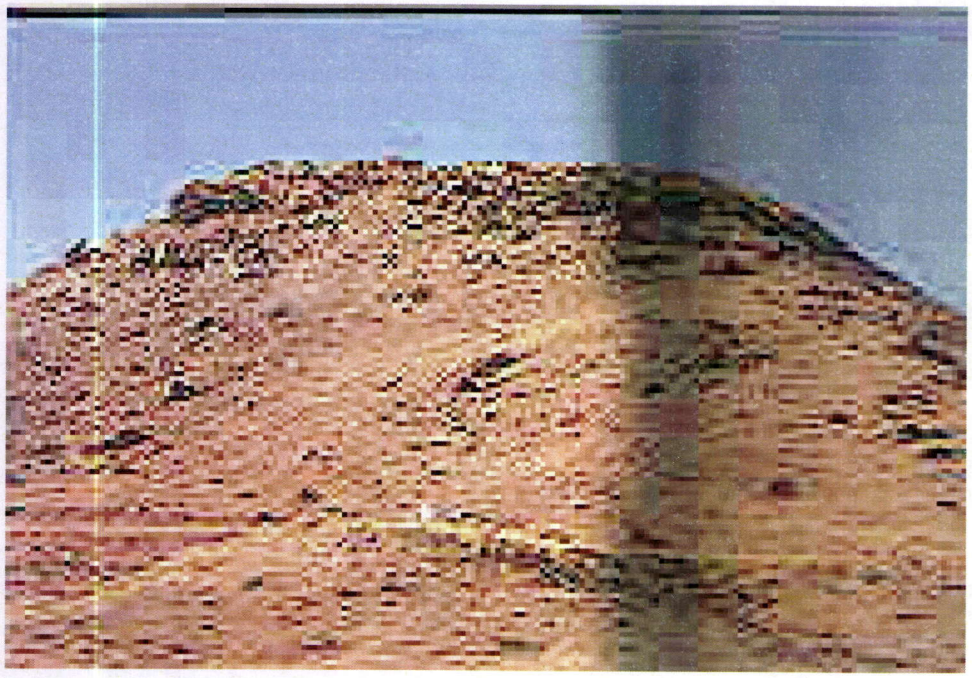


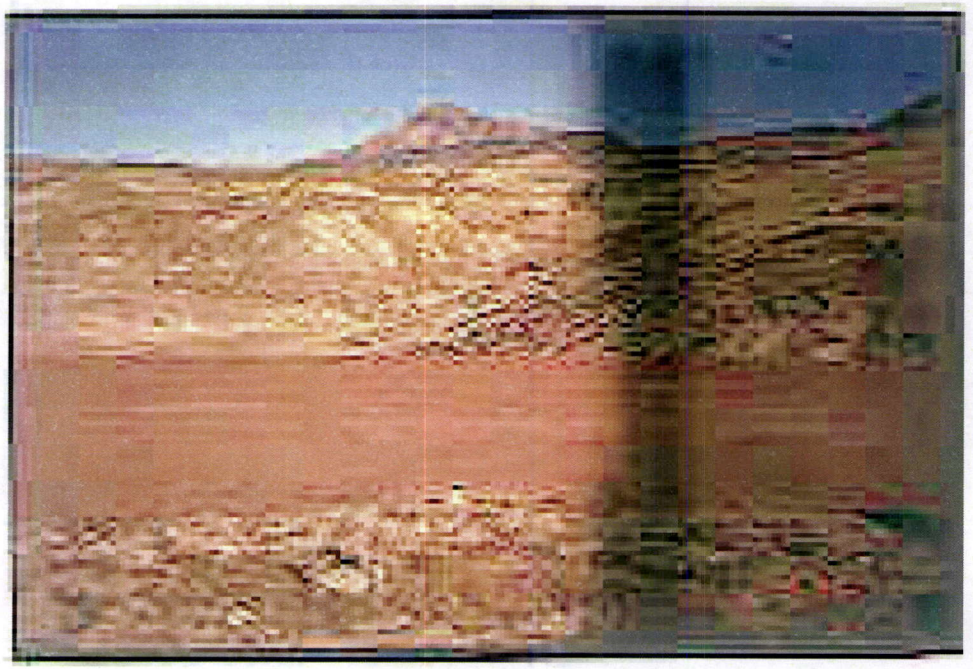


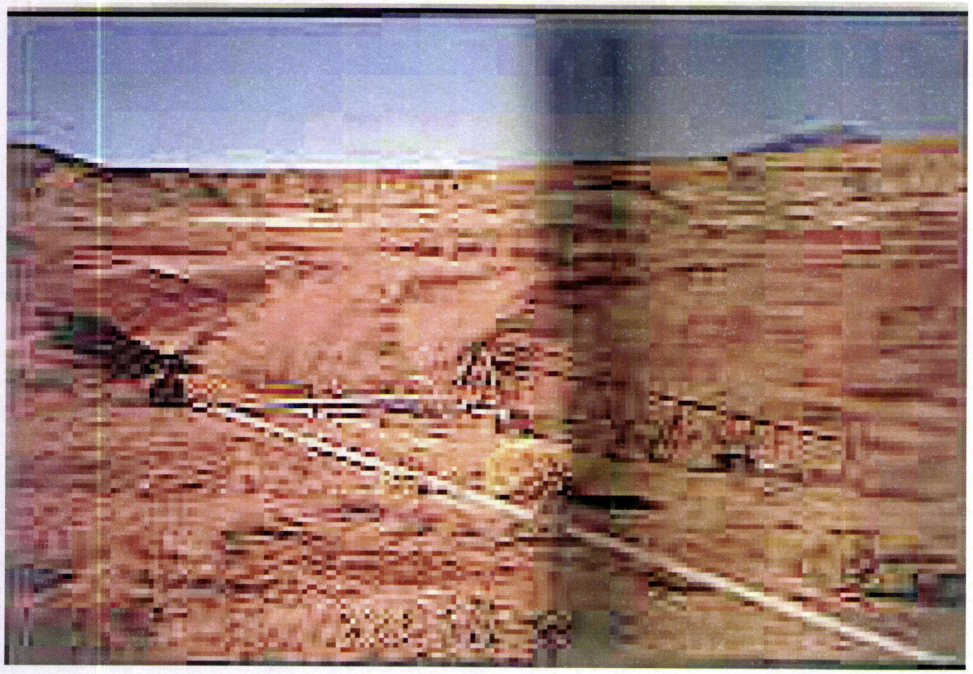


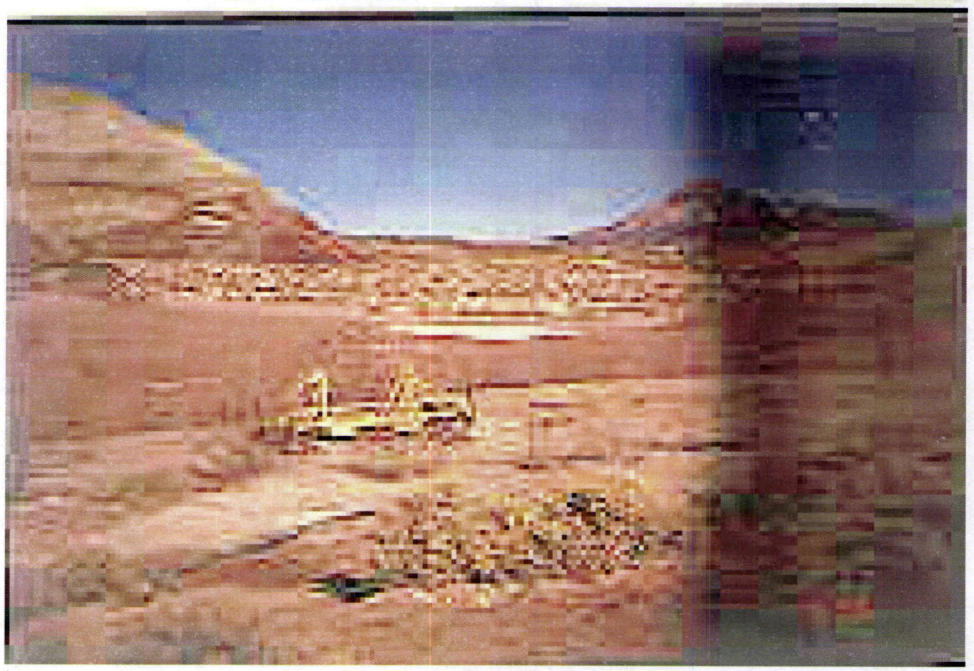


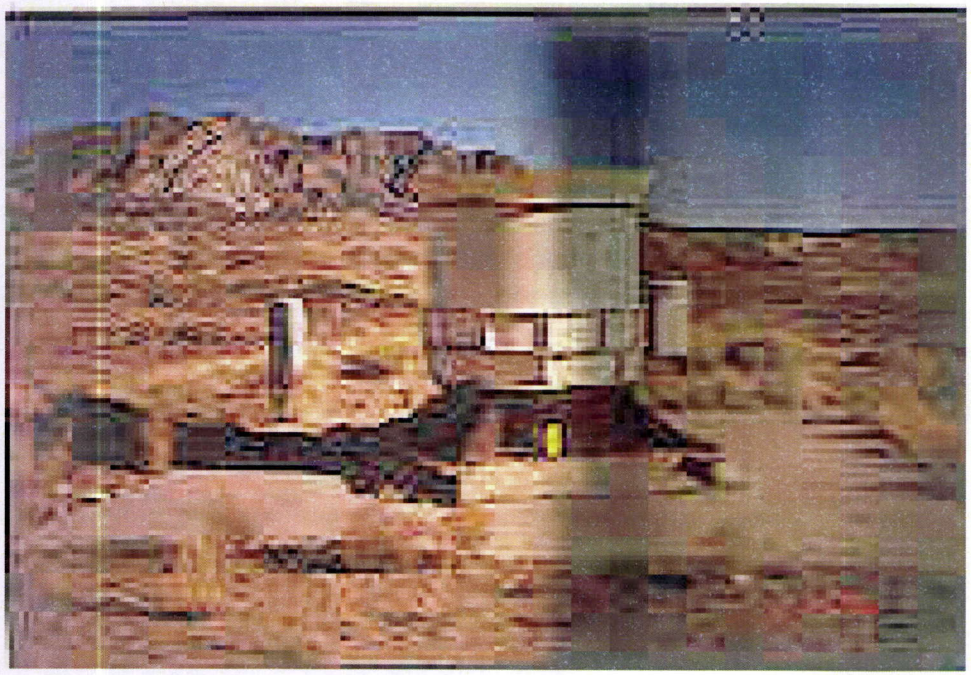


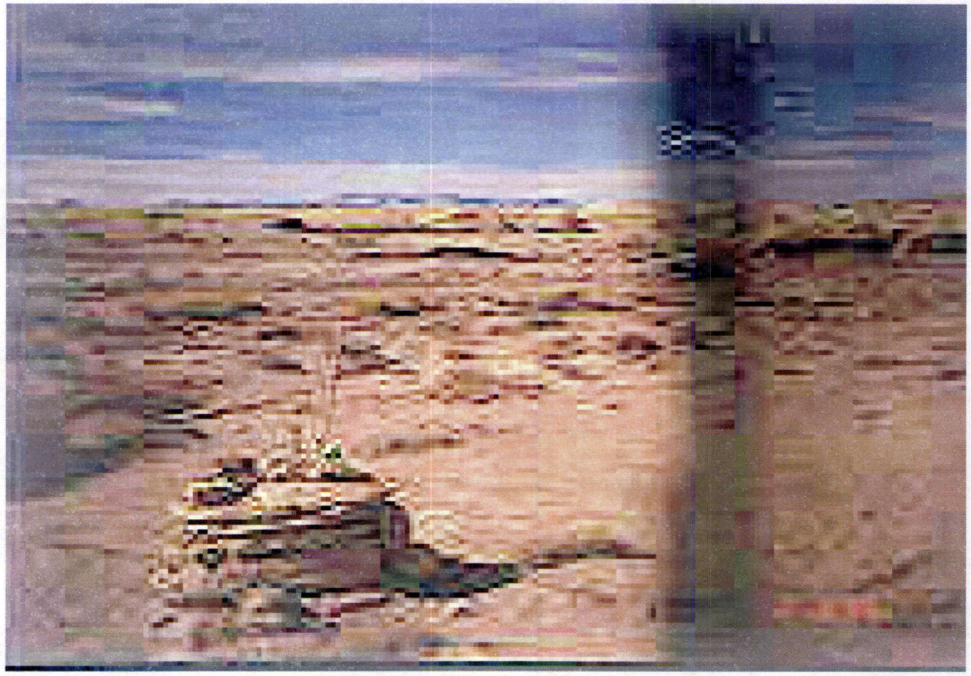


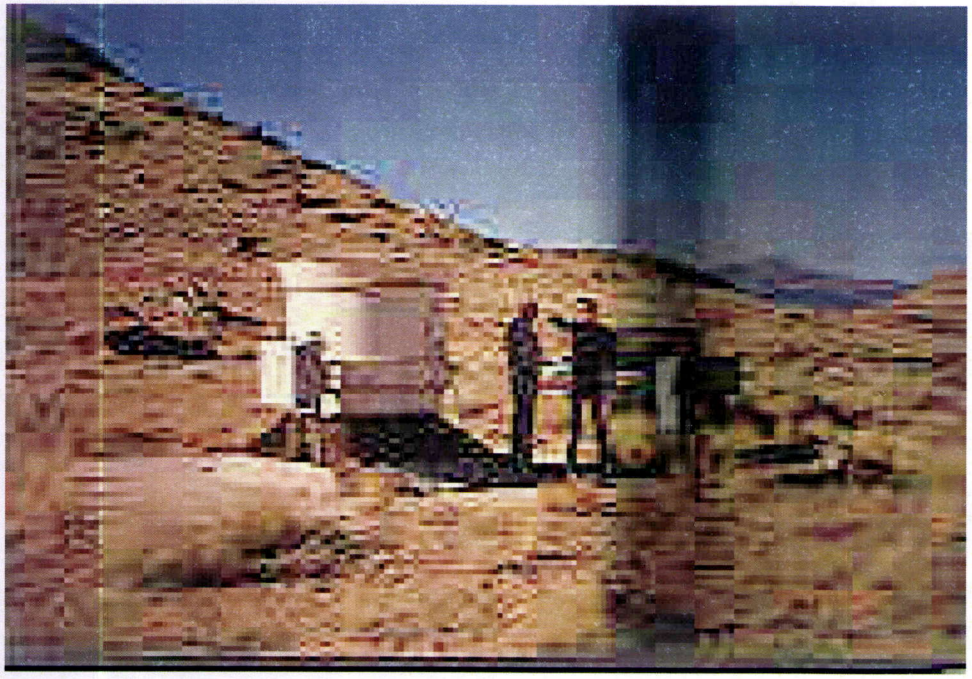


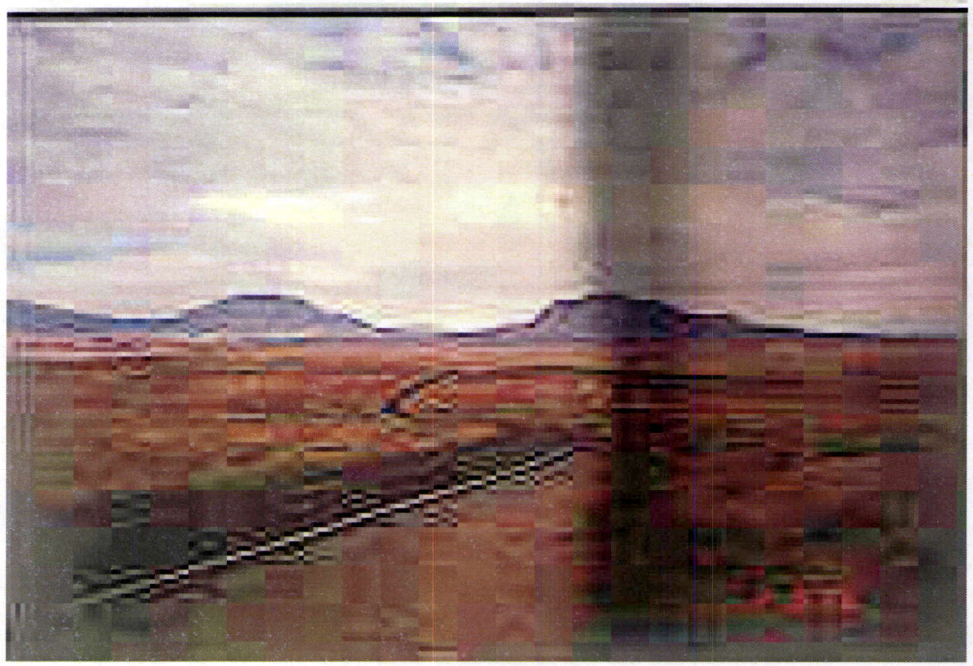


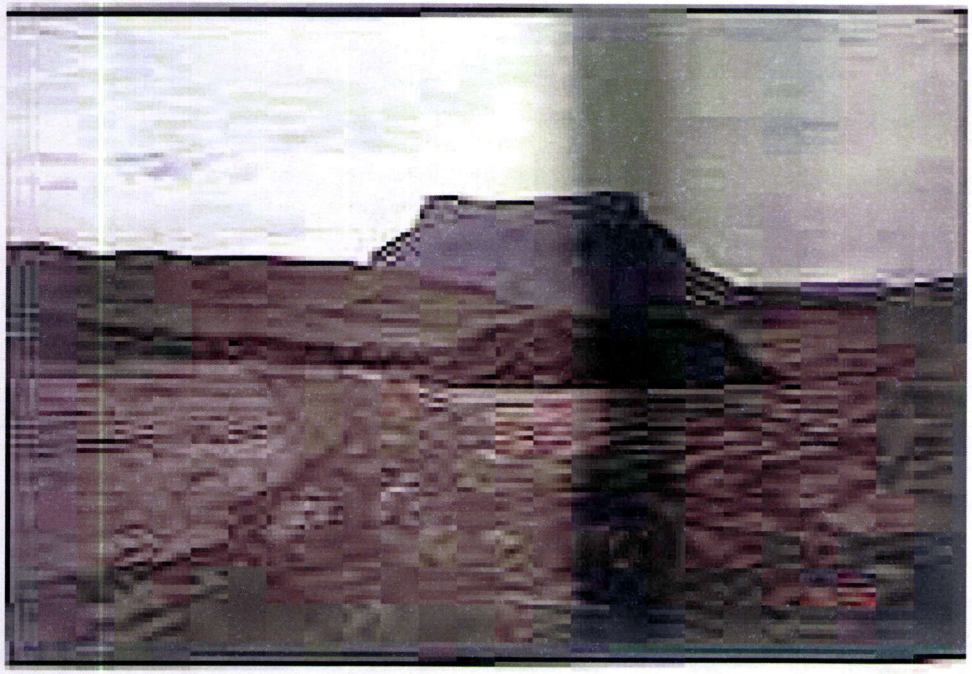












TONY M. MINE PORTALS

WATER TANK

MOVED

FUEL & LUBRICANT STORAGE

ORE BINS

POTABLE WATER WELL #2

BACK UP GENERATORS

GENERATORS & COMPRESSORS

MINE OFFICE & DRY

HIGH VOLUME AIR PARTICULATE SAMPLER

MINE OFFICE

NON-POTABLE WATER WELL #1

GUARD STATION

SURFACE CONSTRUCTION
OFFICE & SHOP

MAINTENANCE SHOPS

ELECTRICAL SHOP

WAREHOUSE

STORAGE SHED

SCALE
0 200' 400' 600'

LEACH FIELD

LUCKY STRIKE SOUTH

LUCKY STRIKE NORTH

ORE
0.65 ACRE

~1.7H ACRE ORE

1.37 ACRE

ORE
~168 ACRE

LOW GRADE ORE (WASTE)

HJS-2
4606.36

WASTE

TEST PIT

4700

4750

4800

4775

4825

4875

4850

4600

4650

4550

4500

4450

5607
5600
5971
Benches
5600
5696
5600
5600
5571
5600
Copper Creek
Copper
32
STATE LEASE ML 28456
33
5135
5200
5317
Creek
5323
2
STATE LEASE ML 32305
FRANK M. PORTA
5200
5046
5150
5189
5077
5200
4800
4800
5264
4924
5082
E WATER
MENT AREAS
VENT HOLES
Bita Grin
4800
5200
5102
5114
16
STATE LEASE ML 31862
5056
5448
TONY M. PORTALS
PORTAL AND
SURFACE FACILITIES
4800
LUCKY STRIKE 10 PORTALS
5200
4800
5020
5103
5131
4928